

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-011

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REVISION DATE

None

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13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250623168GZU-011

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLLS75327XXXXX

Remark: "XXXXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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<u>TEST:</u>	Electrical and Photometric as required to the IES LM-79 test standard.
<u>AUTHORIZATION:</u>	The testing performed was authorized by signed quote number: QGZ250619128.
<u>STANDARDS USED:</u>	The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:
IES LM-79-24	Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI C78.377-2017 (R2022)	Specifications of the Chromaticity of Solid State Lighting Products
<u>DESCRIPTION OF SAMPLE:</u>	The client submitted one sample of model SLLS75327XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-011.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Guangzhou Xiongyi Precision Metalworking Co., Ltd Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450
<u>DATES OF TESTS:</u>	14 July 2025
<u>ISSUED BY:</u>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
<u>TEST LOCATION:</u>	Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

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TEST REPORT

SUMMARY

Model Number:	SLLS75327XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Criteria	Result
Total Lumen Output	997.5 lm
Total Power	14.6 W
Luminaire Efficacy	68.3 lm/W
S/MH(C0/180)	1.09
S/MH(C90/270)	1.01
Correlated Color Temperature (CCT)	2688 K
Color Rendering Index (CRI)	91
R9	66
Chromaticity Coordinate (x)	0.4604
Chromaticity Coordinate (y)	0.4102
Chromaticity Coordinate (u')	0.2631
Chromaticity Coordinate (v')	0.5273

Remark:

N/A

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TEST REPORT

EQUIPMENT LIST

Equipment Used	Model Number	Control Number
Goniophotometer System	Go-R5000	SA063-16
KONICA MINOLTA - Illuminance meter	CX-2B_WL	SA063-16-01
Standard Lamp	D215S	SA063-16-06
Digital Power Meter	PLM3000	SA063-16-09
AC power source for Goniophotometer	PCR-1000WH	SA063-16-10
Temperature Meter	S500-TH	SA047-182

GENERAL REMARK

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When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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TEST REPORT

TEST METHOD

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IES LM-79

Light Distribution and Output Measurements

Light Distribution and total light output (luminous flux) were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer. Temperature 25°C and relative humidity of 60% was measured at a position in the testing laboratory.

The lamp rotates only around the fixed vertical axle in the prescribed burning position. The lamp and mirror permit the measurement of luminous intensity at the direction of any horizontal or vertical angle without tilting the lamp. The lamp was allowed to stabilize before measurements were made.

Chromaticity Measurements

Chromaticity was measured using a 2 meters integrating sphere spectral lamp measurement system, 4 π geometry, with an interior coating reflectance no less than 95 %. Temperature was measured at a position inside the sphere shielded from direct light. Relative humidity of 65% was measured at a position in the testing laboratory.

Spectral radiant flux measurements were made using spectroradiometer attached to the detector port of the integrating sphere. Each lamp was allowed to stabilise before measurements were made. The calibration of the integrating sphere spectroradiometer system is by the reference/standard lamps which are traceable to National Institute of Metrology P.R. CHINA. Lamp efficacy (lumens per watt) for each lamp model was then computed based on the luminous flux result. Electrical measurements including voltage, power and power factor were measured using YOKOGAWA - Digital Power Meter., model WT310E.

Correction factor (self-absorption) has been considered when doing measurement.

Standard lamp used for Goniophotometer method:

Model: D215S

Current: 4.809A DC

Standard lamp used for integrating sphere:

Model: D204

Current: 3.958A DC

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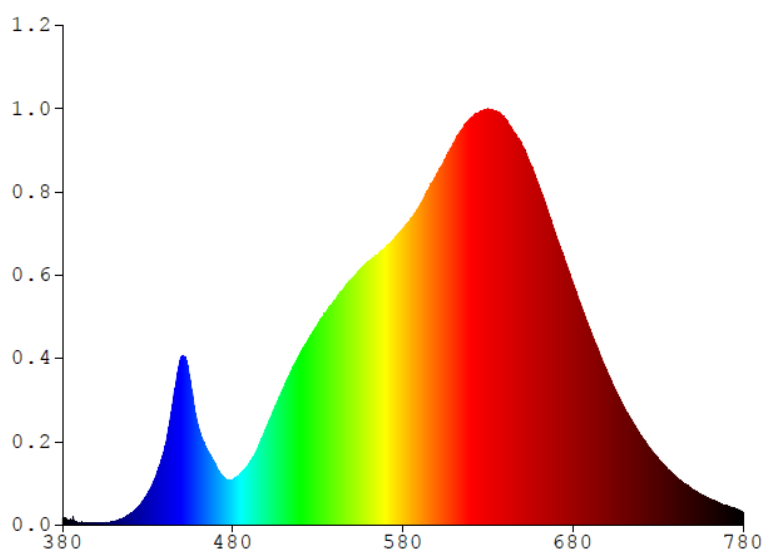
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.4413	480	2.6039	580	16.8600	680	13.7660	780	0.7299
385	0.2475	485	2.9315	585	17.4800	685	12.4210		
390	0.1402	490	3.5698	590	18.1640	690	11.1230		
395	0.1111	495	4.4350	595	19.0600	695	9.9424		
400	0.0961	500	5.6011	600	19.9700	700	8.7659		
405	0.1278	505	6.7473	605	20.8280	705	7.6633		
410	0.1986	510	7.8407	610	21.7540	710	6.7157		
415	0.3633	515	8.9021	615	22.5460	715	5.8736		
420	0.6538	520	9.8239	620	23.1630	720	5.0864		
425	1.0937	525	10.6360	625	23.4630	725	4.3972		
430	1.7747	530	11.4030	630	23.7050	730	3.8026		
435	2.8122	535	12.1280	635	23.5600	735	3.2717		
440	4.3785	540	12.7790	640	23.1230	740	2.8058		
445	7.0866	545	13.4160	645	22.3890	745	2.3826		
450	9.5781	550	14.0130	650	21.6210	750	2.0616		
455	8.1495	555	14.5310	655	20.5590	755	1.7835		
460	5.5227	560	15.0200	660	19.3270	760	1.4992		
465	4.2803	565	15.3550	665	17.9350	765	1.2927		
470	3.3789	570	15.8050	670	16.4780	770	1.1057		
475	2.6744	575	16.2780	675	14.8680	775	0.9551		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

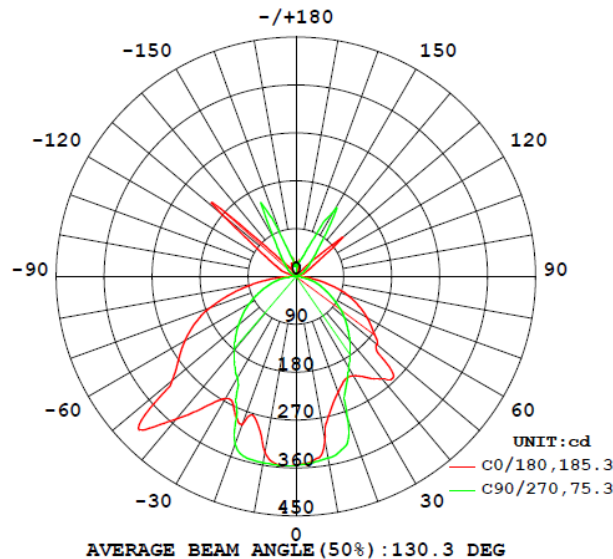
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit	Chromaticit	Chromaticit	Chromaticit
					y	y	y	y
					Coordinate	Coordinate	Coordinate	Coordinate
					(x)	(y)	(u')	(v')
SLLS75327XXXXX								
S2506231 68-011	base-up	2688	91	66	0.4604	0.4102	0.2631	0.5273

Photometric and Electrical Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
SLLS75327XXXXX							
S2506231 68-011	base-up	120.1	123.4	14.6	0.986	997.5	68.3

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	354.3	354.9	354.9	354.7	354.8
5	348.4	348.6	348.3	349.0	351.4
10	313.6	326.4	337.8	345.1	346.5
15	256.3	260.7	270.5	310.6	336.1
20	231.5	227.7	239.7	259.4	282.9
25	215.7	203.2	212.7	224.8	224.7
30	215.6	191.5	186.7	187.2	198.5
35	232.0	195.4	146.5	166.3	176.8
40	251.9	206.5	130.1	145.6	156.9
45	257.5	181.8	118.7	125.2	137.3
50	199.1	171.3	109.2	105.5	118.2
55	176.4	147.0	99.9	85.6	98.8
60	153.9	125.6	88.1	67.9	78.7
65	129.8	103.7	72.8	52.6	60.9
70	104.0	81.0	54.7	38.8	46.0
75	73.0	55.2	36.5	25.2	31.2
80	43.4	31.6	19.6	12.5	15.3
85	18.6	11.7	6.5	4.5	5.5
90	6.9	7.6	6.1	4.5	5.2
95	7.2	7.4	6.7	4.8	4.8
100	4.8	5.1	4.6	3.9	3.4
105	1.7	2.3	2.2	2.1	3.0
110	9.6	5.2	2.0	1.5	1.3
115	19.7	14.9	8.3	1.8	1.3
120	30.1	21.6	11.1	6.5	12.2
125	51.4	34.0	16.8	18.1	21.1
130	115.6	76.0	31.1	24.9	28.9
135	33.0	68.5	50.8	36.2	40.9
140	10.6	30.5	54.8	57.2	59.9
145	10.5	25.9	39.5	101.0	95.5
150	6.3	28.9	46.3	85.0	142.5
155	13.8	37.5	62.9	111.8	80.7
160	22.8	52.4	99.5	62.3	42.1
165	13.8	29.6	15.8	36.5	31.7
170	30.4	12.5	20.4	22.3	25.7
175	21.9	14.4	10.7	11.1	9.3
180	21.8	21.1	20.7	20.2	17.5

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLLS75327XXXXX		
0-30	228.9	23.0
0-40	359.4	36.0
0-60	641.9	64.4
0-90	833.9	83.6
60-90	192.0	19.2
0-180	997.5	100.0

Beam Angle

Total Beam Angle(°)

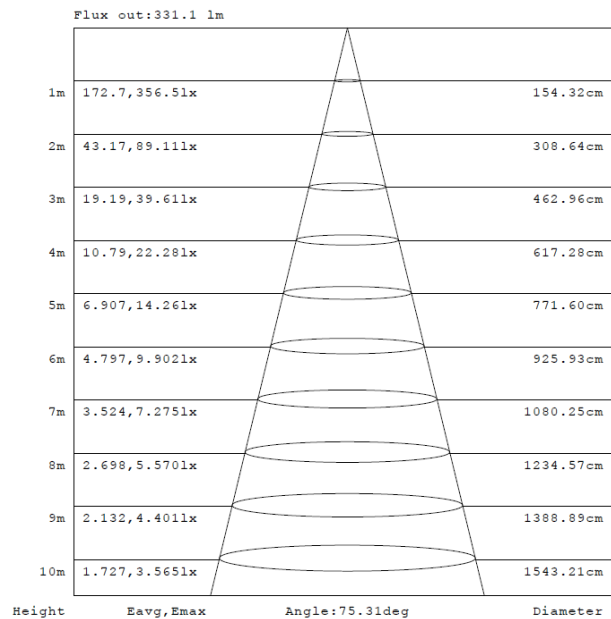
130.3

Illumination Plots

Model No.: SLLS75327XXXXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

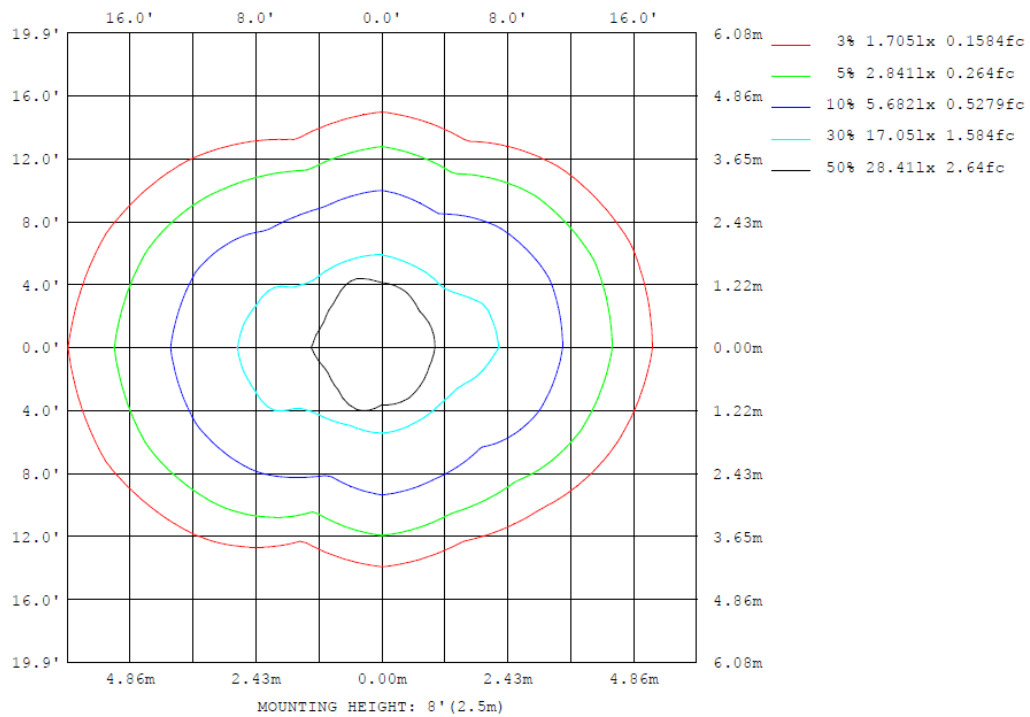
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS75327XXXXX

Model No.: SLLS75327XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS75327XXXXX

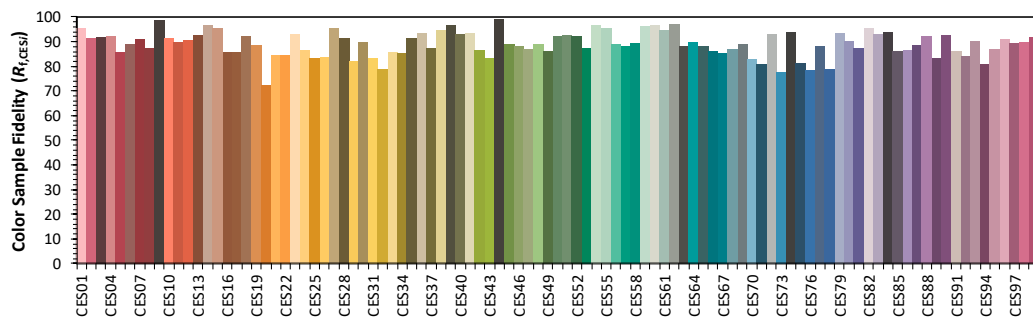
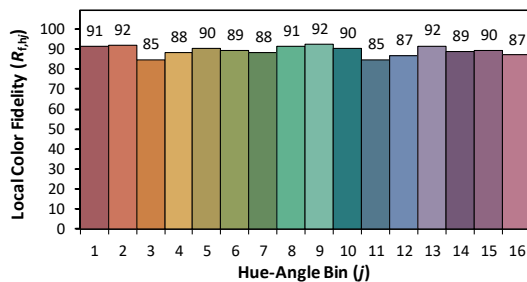
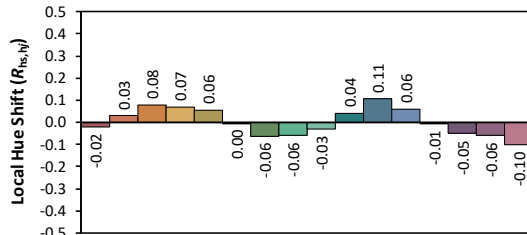
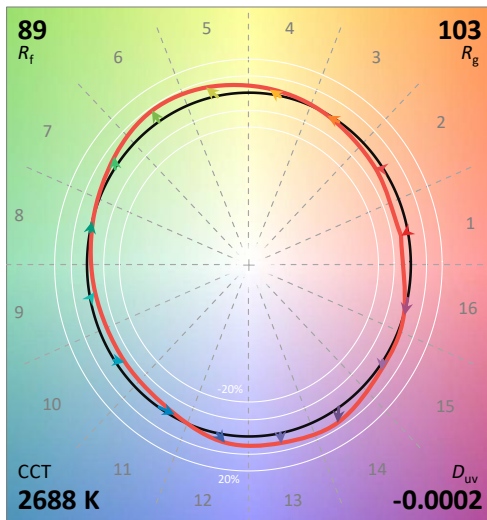
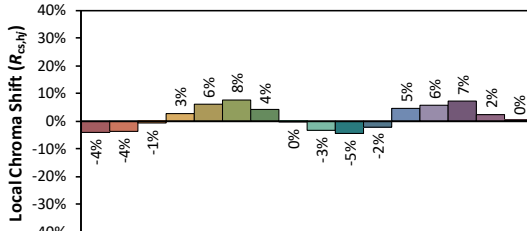
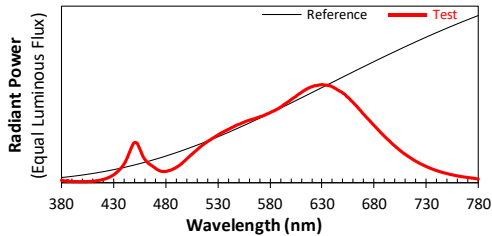
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/14

Model: SLLS75327XXXXX



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4604
 y 0.4102
 u' 0.2631
 v' 0.5273

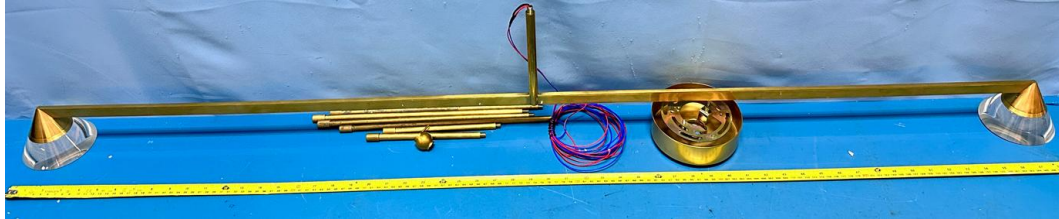
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 66

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

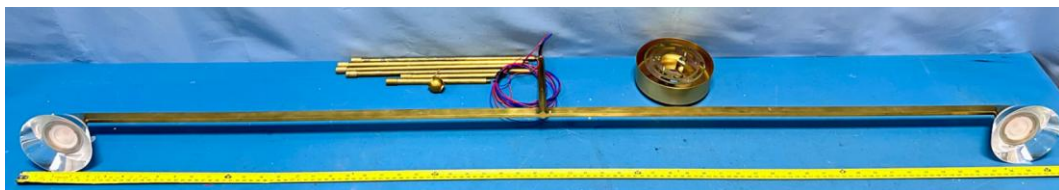
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLLS75327XXXXX



External view of SLLS75327XXXXX



View of LED driver PTB20W-0400-38-VCC1(AB0258)

***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****